

IN THE CLAIMS:

Following are the current claims. For the claims that have **NOT** been amended in this response, any differences in the claims below and the current state of the claims is unintentional and in the nature of a typographical error:

1. (Currently Amended) A method for graphics processing, comprising:
 receiving node and view data for a graphic object;
 building a binary-space-partition tree corresponding to the graphic object, the binary-space-partition tree having up to a predetermined number of at least one shape associated with each leaf;
 sorting shapes at each leaf of the binary-space-partition tree; and
 outputting the sorted shapes.
2. (Original) The method of claim 1, wherein the shapes are sorted into a substantially back-to-front order.
3. (Original) The method of claim 1, further comprising caching the shape data.
4. (Original) The method of claim 1, further comprising traversing the binary-space-partition tree.
5. (Original) The method of claim 1, wherein the shapes are triangles.
6. (Original) The method of claim 1, wherein a configuration component is used, the configuration component balancing the resolution of the binary-space-partition tree against the sorting shapes at each leaf.

7. (Original) The method of claim 3, wherein a configuration component is used, the configuration component balancing resource usage against accuracy in the resolution of the caching.
8. (Currently Amended) A method for graphics processing, comprising:
 - analyzing shapes in a graphic object;
 - creating a root node and a list of additional nodes for a binary-space-partition tree, each node associated with up to a predetermined number of at least one shape;
 - performing a partition plane selection for each additional node,
 - classifying the shapes at the additional node according to the partition plane selection;
 - and
 - creating child nodes according to the shape classification.
9. (Original) The method of claim 8, wherein each node represents a set of elements located in a 3-dimensional spatial region.
10. (Original) The method of claim 8, wherein the shapes are triangles.
11. (Currently Amended) A data processing system having at least a processor and accessible memory, comprising:
 - means for receiving node and view data for a graphic object;
 - means for building a binary-space-partition tree corresponding to the graphic object, the binary-space-partition tree having up to a predetermined number of at least one shape associated with each leaf;
 - means for sorting shapes at each leaf of the binary-space-partition tree; and
 - means for outputting the sorted shapes.
12. (Original) The data processing system of claim 11, wherein the shapes are sorted into a substantially back-to-front order.

13. (Original) The data processing system of claim 11, further comprising means for caching the shape data.

14. (Original) The data processing system of claim 11, further comprising means for traversing the binary-space-partition tree.

15. (Original) The data processing system of claim 11, wherein the shapes are triangles.

16. (Original) The data processing system of claim 11, wherein a configuration component is used, the configuration component balancing the resolution of the binary-space-partition tree against the sorting shapes at each leaf.

17. (Original) The data processing system of claim 13, wherein a configuration component is used, the configuration component balancing resource usage against accuracy in the resolution of the caching.

18. (Currently Amended) A data processing system having at least a processor and accessible memory, comprising:

means for analyzing shapes in a graphic object;

means for creating a root node and a list of additional nodes for a binary-space-partition tree, each node associated with up to a predetermined number of at least one shape;

means for performing a partition plane selection for each additional node,

means for classifying the shapes at the additional node according to the partition plane selection; and

means for creating child nodes according to the shape classification.

19. (Original) The data processing system of claim 18, wherein each node represents a set of elements located in a 3-dimensional spatial region.

20. (Original) The data processing system of claim 18, wherein the shapes are triangles.

21. (Currently Amended) A computer program product tangibly embodied in a machine-readable medium, comprising:

- instructions for receiving node and view data for a graphic object;
- instructions for building a binary-space-partition tree corresponding to the graphic object, the binary-space-partition tree having up to a predetermined number of at least one shape associated with each leaf;
- instructions for sorting shapes at each leaf of the binary-space-partition tree; and
- instructions for outputting the sorted shapes.

22. (Original) The computer program product of claim 21, wherein the shapes are sorted into a substantially back-to-front order.

23. (Original) The computer program product of claim 21, further comprising instructions for caching the shape data.

24. (Original) The computer program product of claim 21, further instructions for comprising traversing the binary-space-partition tree.

25. (Original) The computer program product of claim 21, wherein the shapes are triangles.

26. (Original) The computer program product of claim 21, wherein a configuration component is used, the configuration component balancing the resolution of the binary-space-partition tree against the sorting shapes at each leaf.

27. (Original) The computer program product of claim 23, wherein a configuration component is used, the configuration component balancing resource usage against accuracy in the resolution of the caching.

28. (Currently Amended) A computer program product tangibly embodied in a machine-readable medium, comprising:

- instructions for analyzing shapes in a graphic object;
- instructions for creating a root node and a list of additional nodes for a binary-space-partition tree, each node associated with up to a predetermined number of at least one shape;
- instructions for performing a partition plane selection for each additional node,
- instructions for classifying the shapes at the additional node according to the partition plane selection; and
- instructions for creating child nodes according to the shape classification.

29. (Original) The computer program product of claim 28, wherein each node represents a set of elements located in a 3-dimensional spatial region.

30. (Original) The computer program product of claim 28, wherein the shapes are triangles.